

PT disorders.
XX
XX Example 1; Fig 8; 52pp; English.
XX
XX The invention relates to an isolated polypeptide comprising a 51 amino
CC acid sequence being a generic sequence for a Kunitz-type protease
CC inhibitor or a variant where the sequence is at least 80% identical to
CC the Kunitz domain of human kunitz-type protease inhibitor HKI-18. Also
CC included are an isolated polypeptide construct encoding a host
CC cell comprising a polynucleotide construct encoding kunitz-type protein
CC in an appropriate growth medium under conditions allowing expression of
CC the polynucleotide construct and recovering the polypeptide from the
CC culture medium, a polynucleotide construct encoding the kunitz-type
CC protein and a host cell comprising the polynucleotide construct. The
CC kunitz-type protein is used for the preparation of a medicament for the
CC treatment of systemic inflammatory response syndrome, acute pancreatitis,
CC shock syndrome, disseminated intravascular coagulation, hyperfibrinolytic
CC haemorrhage, myocardial infarction, for prevention of blood loss during
CC major surgery, cardiopulmonary bypass (CPB)-induced pulmonary injury,
CC allergy-induced protease release, deep vein thrombosis, emphysema,
CC rheumatoid arthritis, adult respiratory distress syndrome, chronic
CC inflammatory bowel disease, and psoriasis. The present sequence
CC represents a mutant human HKI-18 with a yeast 212L signal peptide and a
CC KEX-2 cleavage site, expressed in yeast cells
XX
SQ Sequence 111 AA;
Query Match 88.4%; Score 291; DB 6; Length 111;
Best Local Similarity 89.7%; Pred. No. 7, 2e-27;
Matches 52; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
QY 1 YPVRCILPPATGPKARIIRWYFVAVSGCNRFFVGGCRGNANNPASBOECSSCGQS 58
DB 54 YPVRCILPPATGPKARIIRWYFVAVSGCNRFFVGGCRGNANNPASBOECSSCGQS 111
RESULT 7
AAB60623
ID AAB60623 standard; protein; 58 AA.
XX
XX AAB60623;
AC
XX
XX 27-APR-2001 (first entry)
DT
XX
XX Human protease inhibitor BTL.010 Kunitz domain, SEQ ID NO:1.
DE
XX
XX Human BTL.010; neutral serine protease inhibitor; elastase inhibitor;
KW proteinase-3 inhibitor; Kunitz domain; emphysema;
KW idiopathic pulmonary fibrosis; adult respiratory distress syndrome;
KW cystic fibrosis; rheumatoid arthritis; organ failure; glomerulonephritis;
KW platelet activation; blood coagulation; neutrophil activation;
KW monocyte activation; angioplasty; inflammatory diseases; lung injury;
KW vascular injury; nephrotoxic; antirheumatic; antiarthritic.
XX
XX Homo sapiens.
OS
XX
XX US6180607-B1.
PN
XX
XX 30-JAN-2001.
PD
XX
XX 05-AUG-1999; 99US-00369494.
PF
XX
XX 05-AUG-1999; 99US-00369494.
PR
XX
XX 05-AUG-1999; 99US-00369494.
PA (DAVI/) DAVIES C.
PA (CHEN/) CHEN D.
PA (ROCK/) ROCKZINAK S.
XX
XX Davies C, Chen D, Rockznak S;
PI
XX
XX WPI: 2001-190660/19.
DR
XX
XX N-PSDB; AAF59750.
XX

PT Novel serine proteinase inhibitor of the Kunitz family, BTL.010 useful
FT for treating emphysema, cystic fibrosis, adult respiratory distress
PT syndrome, rheumatoid arthritis, organ failure and glomerulonephritis.
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XX Claim 6; Col 9-10; 17pp; English.
XX
XX The invention relates to a novel human serine protease inhibitor of the
CC Kunitz family, BTL.010 (fragments given in AAB60623, AAB60631 and
CC AAB60634). The BTL.010 protein is thought to preferentially inhibit
CC neutral serine proteases such as elastase and proteinase-3, relative to
CC trypsin-like and chymotrypsin-like proteases. A substantial proportion of
CC the BTL.010 protein Kunitz domain (AAB60631) was identified via homology
CC searching in the Genbank high throughput genomic (HTG) DNA sequence
CC database using the Kunitz domain sequences AAB60630, and was confirmed as
CC being novel using the Kunitz domain sequences AAB60632, and AAB60633.
CC This sequence information was extended to provide a larger region of
CC BTL.010 protein sequence data (AAB60634) by identifying an open reading
CC frame (ORF) which comprised DNA encoding the BTL.010 Kunitz domain
CC fragment in a 399 bp fragment of human genomic DNA (AAF59750),
CC corresponding to bases 16016-16414 of Genbank accession number AC004846.
CC The entire BTL.010 Kunitz domain sequence (AAB60623) was obtained from
CC the BTL.010 ORF-encoded sequence. The BTL.010 protein, and pharmaceutical
CC compositions comprising it, may be used for inhibiting protease activity,
CC particularly that of leukocyte elastase, in the prevention, treatment or
CC amelioration of medical conditions such as emphysema, idiopathic
CC pulmonary fibrosis, adult respiratory distress syndrome, cystic fibrosis,
CC rheumatoid arthritis, organ failure or glomerulonephritis. BTL.010
CC compositions of the invention modulate at least one physiological
CC condition such as platelet activation, blood coagulation, neutrophil
CC activation, or monocyte activation. BTL.010 is also useful for the
CC prophylactic or therapeutic treatment of patients undergoing angioplasty,
CC and for the treatment of inflammatory diseases and diseases involving
CC lung and vascular injury. The present sequence represents the human
CC BTL.010 protease inhibitor Kunitz domain
XX
SQ Sequence 58 AA;
Query Match 80.2%; Score 264; DB 4; Length 58;
Best Local Similarity 82.8%; Pred. No. 6, 3e-24;
Matches 48; Conservative 0; Mismatches 10; Indels 0; Gaps 0;
QY 1 YPVRCILPPATGPKARIIRWYFVAVSGCNRFFVGGCRGNANNPASBOECSSCGQS 58
DB 1 YPVRCILPPATGPKARIIRWYFVAVSGCNRFFVGGCRGNANNPASBOECSSCGQS 58
RESULT 8
AAB60631
ID AAB60631 standard; protein; 58 AA.
XX
XX AAB60631;
AC
XX
XX 22-JAN-2003 (first entry)
DT
XX
XX Human Kunitz protease inhibitor protein HKI-18.
DE
XX
XX Human; protease inhibitor; kunitz; HKI-18; antiinflammatory;
KW anticoagulant coagulant; cardiac; CPB; psoriasis; emphysema;
KW systemic inflammatory response syndrome; acute pancreatitis;
KW shock syndrome; disseminated intravascular coagulation;
KW hyperfibrinolytic haemorrhage; myocardial infarction;
KW cardiopulmonary bypass-induced pulmonary injury; rheumatoid arthritis;
KW allergy-induced protease release; deep vein thrombosis;
KW adult respiratory distress syndrome; chronic inflammatory bowel disease.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH 5.55
FT Domain /label= Kunitz_domain
FT /note="This domain is claimed in claim 18"
XX
XX WO200296938-A2.
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